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| APPLICATION NO.        | FILING DATE     | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO.        |  |
|------------------------|-----------------|----------------------|-------------------------|-------------------------|--|
| 10/698,988             | 10/31/2003      | Brian M. Sager       | NSL-014                 | NSL-014 8858            |  |
| 27652                  | 7590 09/28/2005 |                      | EXAMINER                |                         |  |
|                        | . ISENBERG      | PATTERSON, MARC A    |                         |                         |  |
| 204 CASTRO<br>FREMONT, |                 |                      | ART UNIT PAPER NUMBER   |                         |  |
|                        |                 |                      | 1772                    | 1772                    |  |
|                        |                 |                      | DATE MAILED: 09/28/2005 | DATE MAILED: 09/28/2005 |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

# Advisory Action

| Application No.   | Applicant(s) |  |  |
|-------------------|--------------|--|--|
| 10/698,988        | SAGER ET AL. |  |  |
| Examiner          | Art Unit     |  |  |
| Marc A. Patterson | 1772         |  |  |

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|--|-------------------------------------|-------------------------|---------------|--|--|--|--|
| Before the Filing of an Appeal Brief   | Examiner                            | Art Unit                |               |  |  |  |  |
|  | Marc A. Patterson                   | 1772                    |               |  |  |  |  |
| The MAILING DATE of this communication appe  | ars on the cover sheet with the c   | correspondence add      | ress          |  |  |  |  |
| THE REPLY FILED 26 September 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.  |                                     |                         |               |  |  |  |  |
| . The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:   |                                     |                         |               |  |  |  |  |
| The period for reply expires 3 months from the mailing date of the final rejection.  |                                     |                         |               |  |  |  |  |
| b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).   |                                     |                         |               |  |  |  |  |
| Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  NOTICE OF APPEAL |                                     |                         |               |  |  |  |  |
| 2. The Notice of Appeal was filed on A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).   |                                     |                         |               |  |  |  |  |
| AMENDMENTS   |                                     |                         |               |  |  |  |  |
| <ul> <li>The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because (a) They raise new issues that would require further consideration and/or search (see NOTE below);</li> <li>They raise the issue of new matter (see NOTE below);</li> <li>They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or</li> </ul>   |                                     |                         |               |  |  |  |  |
| (d)☐ They present additional claims without canceling a corresponding number of finally rejected claims.  NOTE: (See 37 CFR 1.116 and 41.33(a)).   |                                     |                         |               |  |  |  |  |
| 4. The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  5. Applicant's reply has overcome the following rejection(s):   |                                     |                         |               |  |  |  |  |
| <ol> <li>Newly proposed or amended claim(s) would be a<br/>the non-allowable claim(s).</li> </ol>  | llowable if submitted in a separate | , timely filed amendm   | ent canceling |  |  |  |  |
| 7. For purposes of appeal, the proposed amendment(s): a) will not be entered, or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  The status of the claim(s) is (or will be) as follows:  Claim(s) allowed: none.  |                                     |                         |               |  |  |  |  |
| Claim(s) objected to: <u>none</u> .<br>Claim(s) rejected: <u>12-27</u> .   |                                     |                         |               |  |  |  |  |
| Claim(s) rejected. <u>72-27.</u> Claim(s) withdrawn from consideration: <u>none.</u>   |                                     |                         |               |  |  |  |  |
| AFFIDAVIT OR OTHER EVIDENCE  |                                     |                         |               |  |  |  |  |
| 8.  The affidavit or other evidence filed after a final action, b because applicant failed to provide a showing of good ar and was not earlier presented. See 37 CFR 1.116(e).   | d sufficient reasons why the affida | vit or other evidence i | s necessary   |  |  |  |  |
| 2. The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will <u>not</u> be entered because the affidavit or other evidence failed to overcome <u>all</u> rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).   |                                     |                         |               |  |  |  |  |
| 10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached. REQUEST FOR RECONSIDERATION/OTHER   |                                     |                         |               |  |  |  |  |
| 11. The request for reconsideration has been considered bu   | it does NOT place the application i | n condition for allowa  | nce because:  |  |  |  |  |
| <ul> <li>12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s)</li> <li>13. ☐ Other: See attached.</li> </ul>   |                                     |                         |               |  |  |  |  |
|  |                                     |                         |               |  |  |  |  |

### **ADVISORY ACTION**

#### Acknowledgement of Applicant's Amendment

1. The amendment made in the After Final Amendment filed September 26, 2005 has not been entered because the amendment raises a new issue. The application, prior to amendment, did not include newly submitted Claim 28. The amendment therefore raises issues which would require further search and consideration to be fully considered, and the amendment has therefore not been entered.

#### ANSWERS TO APPLICANT'S ARGUMENTS

Applicant's arguments regarding the 35 U.S.C. 102(b) rejection of Claims 12 – 14, 20 – 21, 23 – 25 and 27 as being anticipated by Chiao (U.S. Patent No. 6,472,467 B1), 35 U.S.C. 103(a) rejection of Claims 16 – 17 as being unpatentable over Chiao (U.S. Patent No. 6,472,467 B1) in view of Singh et al (WO 00/78540), 35 U.S.C. 103(a) rejection of Claim 15 as being unpatentable over Chiao (U.S. Patent No. 6,472,467 B1) in view of Fibiger et al (U.S. Patent No. 6,818,163 B1), 35 U.S.C. 103(a) rejection of Claims 18 – 19 as being unpatentable over Chiao (U.S. Patent No. 6,472,467 B1) in view of Ogawa et al (U. S. Patent No. 5,372,888) and 35 U.S.C. 103(a) rejection of Claims 22 and 26 as being unpatentable over Chiao (U.S. Patent No. 6,472,467 B1) in view of Brinker et al (U.S. Patent No. 6,264,741 B1), of record in the previous Action, have been carefully considered but have not been found to be persuasive for the reasons set forth below.

Applicant argues, on page 7 of the remarks dated September 26, 2005, that Chiao et al do not disclose covalent bonding between organic and inorganic layers; the covalent bonding in Chiao et al, Applicant argues, is amongst the organic material.

However, as stated on page 4 of the previous Action, each layer disclosed by Chiao et al is both an organic and inorganic material, and covalent bonding therefore occurs between inorganic and organic layers.

Applicant also argues on page 7 that the terms 'laminate' and 'nanolaminate' do not appear in Chiao et al; the term 'nanolaminate,' Applicant argues, refers to a laminate on the scale on the scale of a nanometer.

However, as stated on page 4 of the previous Action, Chiao et al clearly disclose a film having multiple layers, therefore a laminate, and inorganic particles having nanometer size within the laminate; the laminate is therefore a nanolaminate; the meaning of the phrase 'on the scale on the scale of a nanometer,' furthermore, is unclear.

Applicant also argues, on page 8, that the term 'laminate' is refers to layers which are laminated.

However, as stated above, Chiao et al clearly disclose a film having multiple layers; the layers are therefore united, and the film is therefore a laminate.

Applicant also argues on page 8 that a drawing 'A' submitted by Applicant is a representation of Chiao et al and drawing 'B' submitted by Applicant is Applicant's claimed invention, and that the claimed invention is distinct as shown because Chiao et al does not teach a material formed by uniting superposed layers.

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However, the drawing submitted by Applicant is not shown in Chiao et al; furthermore, as stated above, Chiao et al clearly disclose a film having multiple layers; the layers are therefore united, and the film is therefore a laminate having superposed layers.

Applicant also argues, on page 9, that the material disclosed by Chiao et al is not disclosed as comprising layers.

However, as stated above, Chiao et al clearly disclose a film having multiple layers.
35 USC 103

Applicant also argues, on page 10, that dependent Claims 16 - 17 and 22 - 26 are suitable for patent protection for the reasons stated with regard to Claims 12; in response, the above answers are repeated.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc A Patterson whose telephone number is 571-272-1497. The examiner can normally be reached on Mon - Fri 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marc A. Patterson, PhD. Examiner
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